BRUHAT BANGALORE MAHANAGARA PALIKE

MEASUREMENT SHEET

RA 1ST AND FINAL BILL

Name of work: Construction of RCC Drain at doddabommasandra Main road from Najappa Circle to Petrol Bunk in Ward No. 10 (Doddabommasandra).

Estimated Cost : Rs. 100.00 Lakhs

Head of Account : P-0541 Emergency Reserve Fund

Job Code: 010-20-000062

Name of Agency: Sri K.B. Alankar, H No. 12, MSV Network Road, near Shoba Apartment, Amruthahalli, Sahakaranagara Post, Bangalore - 560092.

Work order No: BBMP/EE/BTP/WO/199/2020-21 D: 01-03-2021.

Measurements Recarded on :

SL. NO.	DESCRIPTION OF WORK	Nos	L	B	D1	D2	Av.D	QTY	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7	8	9	10	11
1	**Dismantling of existing structures** like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. **i) Lime /Cement Concrete. I. By Manual Means B. Cement Concrete Grade M-15 & M-20.**								Cum	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 01 is							**72.00**	631.46	**45465.00**
2	**Dismantling of existing** structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. iii) Dismantling Stone Masonry.B. **Rubble stone masonry in cement mortar**.								Cum	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 02 is							**467.98**		
	Qty Upto 125%							**443.70**	397.92	**176557.00**
	Qty Above 125%							**24.28**	390.51	**9482.00**
3	**Diversion of water course by providing Coffer dams or bunds** or islands as may be necessary for piers and abutments foundations, bailing out or pumping water during excavation and until completion etc., complete. - - **1.50 mtrs depth Below LWL**								Cum	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 03 is							**91.39**		30651.00
	Qty Upto 125%						91.39	**91.35**	335.57	**30654.00**
	Qty Above 125%							**0.04**	329.32	**13.00**
4	**Earth work in excavation for foundation of structures** as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per specifications. **"V. Marshy soil - B. Mechanical Means**								Cum	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 04 is							**662.03**	210.04	**139053.00**
5	Earth work in **Excavation for foundation** of structures as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per MORTH specification No.304 B. in **Ordinary soil upto 3m** depth(By mechanical means)								Cum	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 05 is							**752.64**		
	Qty Upto 125%							**743.85**	61.93	**46067.00**
	Qty Above 125%							**8.79**	55.63	**489.00**
6	Plain Cement Concrete **1:2:4** with OPC cement @ 240 kgs, with 40mm and down size graded granite metal coarse aggregates @0.84 cum and fine aggregates @ 0.56cum, in open foundation including cost of all materials, labour, HOM curing, from works, scaffolding and centring complete as per Specification complete as Drawing and Technical Specifications.								Cum	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 06 to 07 is							**216.64**	5785.15	**1253295.00**

SL. NO.	DESCRIPTION OF WORK	Nos	L	B	D1	D2	Av.D	QTY	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7	8	9	10	1
7	Providing and laying Plain / Reinforced Cement Concrete design mix **M25 with OPC cement @ 340kgs, with 20mm and down size** graded granite metal coarse aggregates @0.70cum and fine aggregates @ 0.47cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, **Open Foundation** complete as per Drawing and Technical Specification including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per Specifications.								Cum	
	Bed Protection Raft Concrete	1	11.90	1.90	0.15	0.15	0.15	3.39		
		1	30.00	1.90	0.15	0.15	0.15	8.55		
		1	30.00	1.90	0.15	0.18	0.17	9.41		
		1	30.00	1.90	0.18	0.15	0.17	9.41		
		1	15.60	1.90	0.15	0.20	0.18	5.19		
		1	30.00	1.80	0.20	0.15	0.18	9.45		
		1	30.00	1.80	0.15	0.15	0.15	8.10		
		1	30.00	1.80	0.15	0.18	0.17	8.91		
		1	30.00	1.90	0.18	0.15	0.17	9.41		
		1	30.00	1.90	0.15	0.20	0.18	9.98		
		1	30.00	1.90	0.20	0.20	0.20	11.40		
		1	30.00	2.00	0.20	0.15	0.18	10.50		
		1	30.00	2.00	0.15	0.18	0.17	9.90		
		1	30.00	2.00	0.18	0.15	0.17	9.90		
		1	30.00	2.00	0.15	0.15	0.15	9.00		
		1	30.00	2.00	0.15	0.15	0.15	9.00		
		1	30.00	2.00	0.15	0.15	0.15	9.00		
		1	4.00	2.00	0.15	0.15	0.15	1.20		
		Total Qty =						**151.68**		
		Qty Limited to Tender Qty =						**151.20**	5662.71	**856202.00**

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub Division
Bruhath Bengaluru Mahanagara Palike

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidyaranyapura Sub Division

SL. NO.	DESCRIPTION OF WORK	Nos	L	B	D1	D2	Av.D	QTY	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7	8	9	10	11
	Measurements Recarded on : 25/04/22									
8	Providing and constructing Stone Masonry Work in Cement Mortar 1:4 in Foundation complete as per Drawing and Technical Specifications including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. B. Random Rubble Masonry(coursed / uncoursed) MORTH Specification No. 1405.4 **New Stones**								Cum	
	SSM Drain									
	3rd Lift SSM Wall									
	R/S	1	25.00	0.60			0.80	12.00		
		1	28.30	0.60			0.80	13.58		
		1	23.40	0.60			0.80	11.23		
		1	16.80	0.60			0.80	8.06		
		1	28.00	0.60			0.80	13.44		
		1	23.10	0.60			0.80	11.09		
		1	16.70	0.60			0.80	8.02		
		1	19.70	0.60			0.80	9.46		
		1	13.60	0.60			0.80	6.53		
		1	16.70	0.60			0.80	8.02		
		1	17.30	0.60			0.80	8.30		
		1	22.60	0.60			0.80	10.85		
	L/S	1	12.80	0.60			0.80	6.14		
		1	14.90	0.60			0.80	7.15		
		1	13.10	0.60			0.80	6.29		
		1	10.90	0.60			0.80	5.23		
		1	16.40	0.60			0.80	7.87		
		1	18.70	0.60			0.80	8.98		
		1	26.50	0.60			0.80	12.72		
		1	28.10	0.60			0.80	13.49		
		1	16.40	0.60			0.80	7.87		
		1	15.50	0.60			0.80	7.44		
		1	19.50	0.60			0.80	9.36		
	Rasing of SSM Wall									
	LHS	1	11.90	0.60			0.60	4.28		
		1	30.00	0.60			0.60	10.80		
		1	30.00	0.60			0.60	10.80		
		1	30.00	0.60			0.60	10.80		
		1	15.60	0.60			0.60	5.62		
		1	30.00	0.60			0.60	10.80		
		1	30.00	0.60			0.60	10.80		
		1	30.00	0.60			0.60	10.80		
		1	30.00	0.60			0.60	10.80		
		1	30.00	0.60			0.60	10.80		
		1	30.00	0.60			0.60	10.80		
		1	30.00	0.60			0.60	10.80		
		1	30.00	0.60			0.60	10.80		
		1	30.00	0.60			0.60	10.80		
		1	30.00	0.60			0.60	10.80		
		1	4.00	0.60			0.60	1.44		
						Total Qty =		386.46		
						Qty Limited to Tender Qty =		375.17	4802.25	1801660.00

E&FC. 8/5/22

ASSISTANT EXECUTIVE ENGINEER Vidyaranyapura Sub-Division Bruhath Bengaluru Mahanagara Palike

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidyaranyapura Sub Division

SL. NO.	DESCRIPTION OF WORK	Nos	L	B	D1	D2	Av.D	QTY	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7	8	9	10	1
	Measurements Recarded on : 25/04/2022									
9	Providing and constructing Stone Masonry Work in Cement Mortar 1:4 **using available stones at site** in Foundation complete as per Drawing and Technical Specifications including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. B. Random Rubble Masonry(coursed / uncoursed)								Cum	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 08 to 09 is							**562.75**	3108.13	**1749100.00**
10	Providing ruled pointing 20 mm deep to coursed stone masonry with cement mortar after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.**KSRB 15.1.3 – do – cement mortar 1:3**								Sqm	
	SSM Drain									
		2	11.90				1.60	38.08		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	15.60				1.60	49.92		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	30.00				1.60	96.00		
		2	4.00				1.60	12.80		
					Total Qty =			**1540.80**		
					Qty Limited to Tender Qty =			**1536.00**	160.98	**247265.00**

ASSISTANT EXECUTIVE ENGINEER Vidyaranyapura Sub-Division Bruhath Bengaluru Mahanagara P...

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidayranyapura Sub Division

SL. NO.	DESCRIPTION OF WORK	Nos	L	B	D1	D2	Av.D	QTY	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7	8	9	10	11
	Measurements Recarded on : 25/04/22									
11	Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.43cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications								Cum	
		628	0.45	0.45			0.45	57.23		
	Total							**57.23**		
	Qty upto 125%							**21.20**	6040.23	**128053.00**
	Qty Above 125%							**36.03**	5927.80	**213558.00**

213578.00

Assistant Engineer
Ward No. 10

ASSISTANT EXECUTIVE ENGINEER
Assistant Executive Engineer
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

SL. NO.	DESCRIPTION OF WORK	Nos	L	B	D1	D2	Av.D	QTY	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7	8	9	10	11
	Measurements Recarded on : 25/04/22									
12	Tubular Steel Railing on Medium Weight Steel Channel (ISMC Series) 100 mm x 50mm:-Providing, fixing and erecting 50 mm dia steel pipe railing in 3 rows duly painted on medium weight steel channels (ISMC series) 100 mm x 50 mm, 1.2 metres high above ground, 2 m centre to centre, complete as per approved drawings as per specifications.								Mtrs	
	Inside Lake									
		1	12.00					12.00		
		1	10.00					10.00		
		1	12.60					12.60		
		1	16.20					16.20		
		1	6.50					6.50		
		1	4.90					4.90		
		1	9.80					9.80		
		1	9.70					9.70		
		1	9.40					9.40		
		1	12.50					12.50		
		1	16.80					16.80		
		1	10.50					10.50		
		1	12.90					12.90		
		1	10.20					10.20		
		1	15.00					15.00		
							Total Qty =	**169.00**		
							Qty Limited to Tender Qty =	**168.00**	1616.62	**271592.00**

CSFR 27/04

ASSISTANT EXECUTIVE ENGINEER Vidyaranyapura Sub-D Bruhath Bengaluru Mahanagara

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidayranyapura Sub Division

SL. NO.	DESCRIPTION OF WORK	Nos	L	B	D1	D2	Av.D	QTY	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7	8	9	10	11
	Measurements Recarded on : 25/04/22									
13	**KSRRB M100-1 Loading and Unloading** of Stone Boulder / Stone aggregates /Sand/ Kanker / Moorum. KSRRB M100-1 : Placing tipper at loading point, loading with front end loader,dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications.								Cum	
	Quantity Vide Item No-5,6 And 7							1414.67		
								1414.67		
	Qty upto 125%							**879.81**	137.17	**120684.00**
	Qty Above 125%							**534.86**	134.62	**72003.00**
14	**KSRRB M2200-6.** Providing **T.M.T. steel** reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200								Tonne	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 10 is							**9.07**	77354.11	**701602.00**
	EIRL									
E1	Boundry Pillar:- Reinforced cement concrete M-15 grade boundry pillars of standard design as per IRC:25-1967, fixed in position including finishing and lettering but excluding painting complete as per specifications. MORTH Specification No. 806								Nos	
	Cement Concrete Poles									
		628						628.00		
	Total							**628.00**	526.25	**330485.00**

Sunith. N K
Assistant Engineer
Ward No. 10 25/04/2022

Assistant Executive Engineer
Vidyaranyapura Sub Division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

SL. NO.	DESCRIPTION OF WORK	Nos	L	B	D1	D2	Av.D	QTY	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7	8	9	10	11
	Measurements Recarded on :									
E2	Providing chain link fencing 50mm size of 8 guage properly stretched between existing rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint								Sqm	
	Chain Link Fencing									
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	30.00				2.20	66.00		
		1	2.00				2.20	4.40		
							Total Qty =	**1324.40**		
							Qty Limited to Tender Qty =	**1324.40**	795.49	**1053547.00**
										9246826.00
	Sub Total									**1109619.00**
	GST @ 12%									**TOTAL** **10356445.00**

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidayranyapura Sub Division